

### **Claims**

1. Raman pump source comprising a first laser diode and a second laser diode, a coupler and a polarization beam combiner, wherein the signals of the two laser diodes are combined in a polarization maintaining coupler with two in- and two outputs, and the outputs of the coupler are linked to the Polarization beam combiner, wherein the two outputs of the coupler and the two inputs of the polarization beam combiner are linked by polarization maintaining fibers.
2. Raman pump source according claim 1 wherein the lengths of the polarization maintaining fibers differs from each others according the coherence lengths of the laser diodes.
3. Raman pump source according claim 1 wherein the polarization beam combiner is linked to one input of a wavelength multiplexer where the second input is connected to an erbium doped fiber amplifier.

4. Raman pump source according claim 1 wherein the polarization beam combiner is linked to one input of a circulator where the second input is connected to an erbium doped fiber amplifier
5. Communication Network with transmitters, receivers , transmission links and several amplifiers pumping the Raman amplifiers with the Raman pump according claim 1.